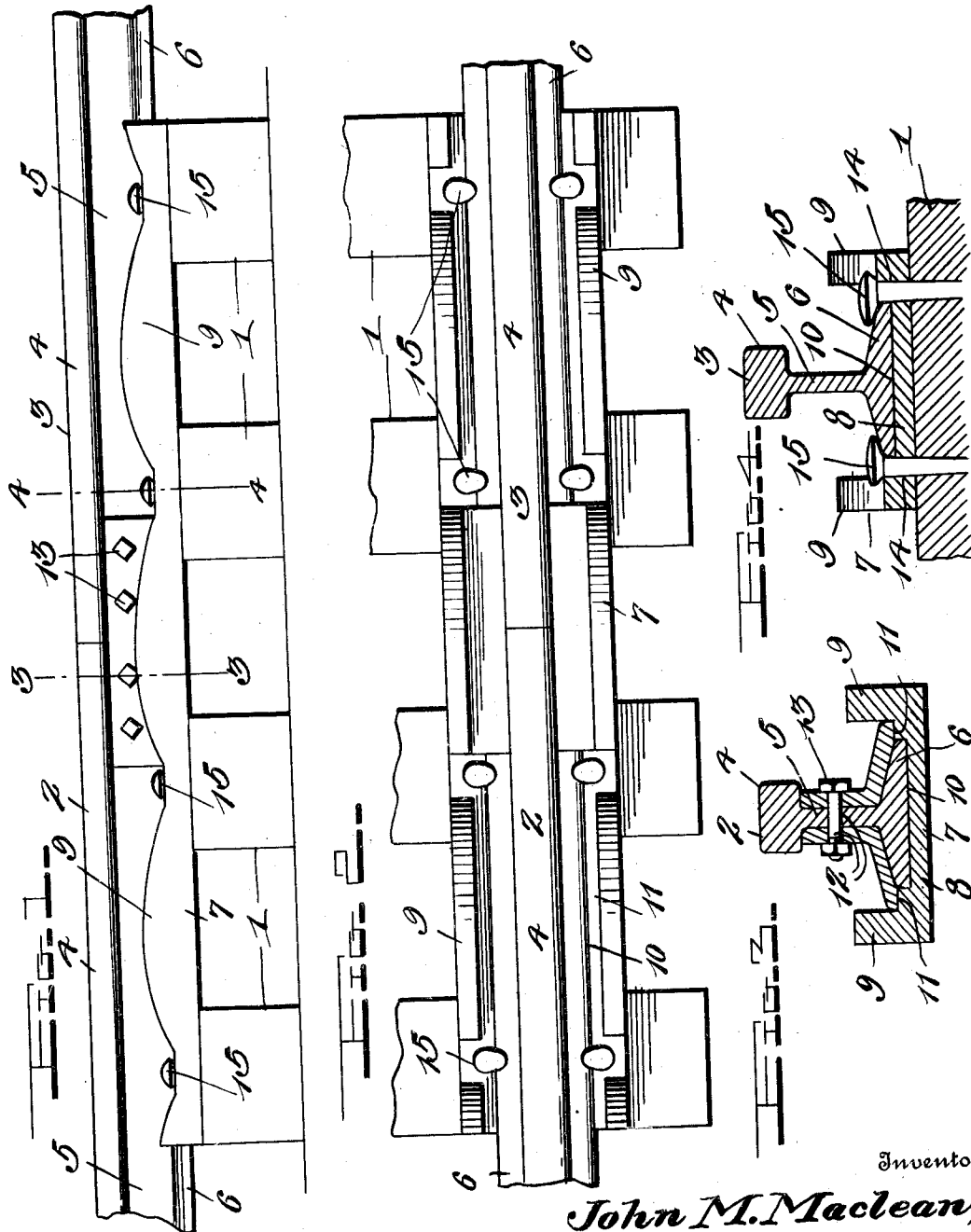


J. M. MACLEAN.
JOINT CHAIR.
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Patented Jan. 28, 1913.

1,051,604.



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UNITED STATES PATENT OFFICE.

JOHN M. MACLEAN, OF SNEADS, FLORIDA.

JOINT-CHAIR.

1,051,604.

Specification of Letters Patent.

Patented Jan. 28, 1913.

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To all whom it may concern:

Be it known that I, JOHN M. MACLEAN, a citizen of the United States, residing at Sneads, in the county of Jackson and State of Florida, have invented certain new and useful Improvements in Joint-Chairs, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to improvements in rail joints and an object thereof is to provide a joint for connecting the meeting ends of the rails, which will prevent all lateral and longitudinal movement of the rails.

15 A further object of this invention is the provision of a rail joint which will connect the meeting ends of the rails so as to form a practically continuous rail which will prevent all noise and jar usually caused by a train passing over a joint of ordinary construction.

20 With these and other objects in view, my invention consists in the novel arrangement and construction of parts which will be hereinafter more fully described and claimed, and is illustrated in the accompanying drawings in which,

Figure 1 is a side elevation of my joint chair secured to the rails and ties. Fig. 2 is a top plan view thereof. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a section on the line 4—4 of Fig. 1.

Referring more particularly to the drawings, the numeral 1, designates the cross ties of an ordinary railroad track. The rails are of the usual construction, having heads 4, webs 5, and base flanges 6.

My improved chair plate 7 comprises a body portion 8, having vertical longitudinally extending flanges 9 on the opposite edges thereof. A seat 10 is formed in the chair for the reception of the rails. Extending longitudinally of the flanges 9 are shoulders 11. Angular fish plates 12 are placed upon the rails and the base portions thereof are adapted to overlap the edges of the base flanges of the rails and rest on the shoulders 11.

50 The rails and the fish plates are provided with suitable openings 12 for the reception of bolts 13 to retain the members in their respective positions. Flanges 9 are curved and spaced and the plates are so arranged on the ties that the flanges 9 span the ties,

thereby materially strengthening the chair and preventing it from sinking.

Apertures 14 are formed in the plate between the opposed faces of the flanges 9 and spikes 15 are driven through these openings 60 and into the ties, thereby securely fastening the chair to the ties. In assembling my improved rail chair, the base plate 8 is placed upon the ties, in such position that the curved flanges span the cross ties. The 65 rails are then placed in position in the seat 10 and the fish plates are then placed upon the rails, having their lower edges seated on the shoulders 11 of the flanges 9. The spikes 15 are then inserted in the openings 70 14 to effectually prevent lateral or longitudinal movement of the chair on the ties. The spaces between the opposed faces of the flanges form passages for the outlet of water, thereby preventing corroding of the 75 spikes and the joint chair.

From the above description taken in connection with the drawings, it will be seen that I have provided a simple and effective means for preventing the spreading of the 80 rails and longitudinal or lateral movement thereof with relation to the ties.

Having thus described my invention, what I claim is:—

The combination with the meeting ends of 85 a pair of rails and supporting ties thereof, of a base plate having a plurality of spaced upstanding flanges extending along the opposite longitudinal edges thereof, said flanges formed with longitudinally extend- 90 ing shoulders, said base plate formed with a seat for the rails, fish plates secured to the opposite sides of the rails and having their lower edges overlapping the base flanges of the rail and resting on the shoulders of the 95 flanges, spikes for securing the base plate and the rails to the ties disposed in the spaces between the upstanding flanges, said upstanding flanges being arranged so that their opposite ends are disposed above the 100 opposing edges of the ties and the intermediate portions of the flanges being adapted to span the spaces between the ties thereby strengthening the chair.

In testimony whereof I hereunto affix my 105 signature in the presence of two witnesses.

JOHN M. MACLEAN.

Witnesses:

B. LIDDON,

JOHN P. HUNTER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."